

CLAIMS

We claim:

- 1 1. A method comprising:
 - 2 creating a description of a user interface, said description
 - 3 based upon a data model of a database; and
 - 4 distributing said description to a client, said client
 - 5 enabled thereupon to generate elements of said user interface
 - 6 that permits a user of said client to transact with said database
 - 7 in a manner conforming to said data model.
- 1 2. A method according to claim 1 further comprising:
 - 2 said client requesting that said description be created.
- 1 3. A method according to claim 1 wherein said creating
- 2 includes:
 - 3 classifying of entities according to said model.
- 1 4. A method according to claim 1 further comprising:
 - 2 interpreting of said description by said client;
 - 3 creating of a controller hierarchy resulting from said
 - 4 interpretation; and
 - 5 generating of elements of said user interface through said
 - 6 controllers.
- 1 5. A method according to claim 4 further wherein said
- 2 client requests data from said database, said data utilized to
- 3 populate said user interface elements.

1 6. A method according to claim 3 wherein an application
2 server performs said classifying, creating and distributing.

1 7. A method according to claim 6 wherein said application
2 server obtains said data model prior to classifying.

1 8. A method according to claim 6 wherein said application
2 server receives preferences of said client, said preferences
3 utilized in creating said description.

1 9. A method according to claim 6 wherein said application
2 server receives authentication information from said client, said
3 server authorizing said client prior to creating said
4 description.

1 10. A method according to claim 3 wherein said classifying
2 includes:

3 determining whether a given entity satisfies first set of
4 conditions, and if not, then classifying said given entity as a
5 Dependent entity type;

6 if said given entity satisfies said first set of conditions,
7 then determining if said given entity additionally satisfies a
8 second set of conditions; and

9 if said given entity is determined to additionally satisfy
10 said second set of conditions, then classifying said given entity
11 as a Enumeration entity type, and if not, then classifying said
12 entity as a Main entity type.

1 11. A method according to claim 10 wherein if said given
2 entity is classified as type Enumeration then:
3 providing for said given entity a Query window; and
4 providing for said given entity a Modal Select Dialog.

1 12. A method according to claim 10 wherein if said given
2 entity is classified as type Enumeration then:
3 providing for said given entity a Query window;
4 providing for said given entity a Form window and a Modal
5 Form Dialog; and
6 providing for said given entity a Modal Select Dialog.

1 13. A method according to claim 1 wherein said creating and
2 distributing are repeated for every desired instantiation of said
3 user interface to said database.

1 14. A system comprising:
2 a client; and
3 an application server coupled to said client, said
4 application server configured to provide to said client a
5 description of a user interface to a database, said description
6 based upon the data model of said database.

1 15. A system according to claim 14 wherein said client
2 provides at least one a request for said user interface
3 description, preferences and authentication information.

1 16. A system according to claim 15 wherein said server
2 provides data from said database to said client in order to
3 populate said user interface.

1 17. An article comprising a computer readable medium having
2 instructions stored thereon which when executed causes:

3 creating a description of a user interface, said
4 description based upon a data model of a database; and

5 distributing said description to a client, said client
6 enabled thereupon to generate elements of said user interface
7 that permits a user of said client to transact with said database
8 in a manner conforming to said data model.

1 18. An apparatus comprising:

2 means for creating a description of a user interface, said
3 description based upon a data model of a database; and

4 means for distributing said description to a client, said
5 client enabled thereupon to generate elements of said user
6 interface that permits a user of said client to transact with
7 said database in a manner conforming to said data model.

1 19. An method according to claim 1 further comprising:

2 creating property lists for each of four tasks, said tasks
3 including Query, List, Form and Identify tasks, said lists
4 determining the visibility of properties in said elements of said
5 user interface.